



# ANACONDA / YERINGTON MINE

U.S. ENVIRONMENTAL PROTECTION AGENCY • REGION 9 • JANUARY 2005

*Yerington, Nevada*

## SITE OVERVIEW AND UPDATE ON ACTIVITIES

**H**ello and Happy New Year to Yerington residents and others interested in the Anaconda/Yerington Mine site. This fact sheet has been written by the U.S. Environmental Protection Agency (EPA) to update the community on recent changes in oversight of the project and provide an overview of the history of the mine and current status of investigation and cleanup activities. We value your participation in our efforts to better understand the situation both on and off the mine site. It is through collaboration with the community, the Bureau of Land Management (BLM) and the Nevada Division of Environmental Protection (NDEP) that we will be able to clean up the site and protect the affected communities. Your comments on this fact sheet or general concerns about the site are welcomed and encouraged. Please see the end of this newsletter for contact information.

### EPA Assumes Lead Agency Role at Yerington Mine Site

Many of you have probably heard that EPA is assuming the lead agency role at the site and will make it a "106 site" or issue a "106 Order." This section will explain how that came about and what it means. Based on a request from NDEP, EPA has agreed to become the regulatory lead agency for investigation and cleanup at the Anaconda/Yerington Mine site due to the complexity of the project. The Memorandum of Understanding (MOU) that EPA, BLM and NDEP had been using will no longer apply. Under the original MOU, all three agencies had to agree on what actions the Atlantic Richfield Company (ARC) needed to do. Due to the cumbersome nature of the MOU and the lack of enforcement authority for EPA, progress on the site has not been what the agencies would have liked. With this change, the final decision maker on most issues (after consulting with NDEP, BLM and various stakeholders) will be EPA. EPA will still collaborate with BLM and NDEP on the project, however EPA now has the authority to move forward with site activities more directly than in the past. This authority comes from Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund). It enables EPA to order responsible parties, if necessary, to conduct

work at the site. This change should speed up activities at the mine and ensure that investigation and cleanup is consistent with best practices such as those used at other sites nationally. At this time, EPA is not proceeding to list the site on the National Priorities List (NPL or Superfund list). However, this would be an option if "potentially responsible parties" (PRPs) are unwilling to proceed.

### Overview and History of Anaconda Copper Mine (Yerington Mine)

Covering more than 3,400 acres in Lyon County, Nevada, the old Anaconda Copper Mine, also known as the Yerington Mine, consists of tailings piles, mill buildings, waste rock and evaporation ponds (see map, page 3). From 1918 until 1978, the site was a low-grade copper mine and milling operation that generated approximately 360 million tons of ore and debris. Toward the end of this period, the mining company also evaluated the economics of producing uranium from the copper mining process. Following the mine closure by Anaconda, later operators used portions of the site to further extract copper from the tailings piles and as a metal salvage facility.

In the late 1970s and early 1980s, NDEP began its investigation and attempts to control impacts from the mine on the environment. Studies found that the tailing

streams contained arsenic, mercury, lead, copper, zinc and chromium and that contamination had migrated into the groundwater. This led to NDEP directing ARC, who purchased the mine in 1977, to install “pump-back” wells at the northern end of the site to control the contaminated groundwater. These wells pump water from the contaminated plume into three lined evaporation ponds on site and prevent at least some of that water from reaching the Walker River via the Wabuska Drain.

In 1988, the Yerington Mine property was sold to Arimetco, Inc. Arimetco built five lined leach pads where acid and other solutions were used to extract copper from copper oxide ore and tailings followed by the production of purified copper using electricity (electroplating). Filing Chapter 11 bankruptcy in 1997, Arimetco continued its copper recovery operations until late 1999 and then abandoned the site in January 2000 through bankruptcy.

The Atlantic Richfield Company, as a previous owner of the Anaconda Copper Mine, remains the PRP for investigation of the site. Additionally, BLM is the manager of the public lands portion of the property.

## Actions Taken to Determine Impacts from Mine

Local residents collected water samples from domestic and tribal wells in 1999 and found elevated levels of contamination. In response to concerns from local residents including the Yerington Paiute Tribe, the Walker River Paiute Tribe and neighbors in the Sunset Hills subdivision, NDEP and EPA decided that further investigation of groundwater was warranted to determine if contamination from the mine had migrated to offsite wells. Results of the expanded investigation indicated that the mine site could indeed be impacting groundwater off site.

For the past four years (and under the MOU between the three agencies), site investigations continued including the monitoring of private wells. There has been much uncertainty as to what extent off-site migration of contaminants might be affecting these wells. The situation became more complicated with the discovery that uranium extraction had been evaluated during mining operations. This concern over potential radiological contamination led to further on-site sampling for uranium and other radioisotopes as well as more domestic well sampling. In 2004, BLM conducted a radiological screening on a portion of the site

which lies on public land (including the Process Area) and found levels of radiation in some areas that could be harmful to on-site workers without appropriate protective equipment. Upon this discovery, BLM expanded their sampling to include the evaporation and sulfide tailings ponds and got similar results (see photo on back).

As you know from the October 2004 fact sheet, ARC is currently sampling soil and groundwater in the Process Area (see photo on back). The information gathered in this effort will give EPA a “first look” at the types of contamination that might be in that part of the site. After getting a more complete understanding of the nature and extent of the contamination, we can better determine the best ways to clean it up and reduce the risk to human health and the environment.

Increased sampling of domestic wells continued through 2004, indicating some levels of radiation higher than acceptable by government standards. As a precaution, some residents were given the option of receiving bottled water provided by ARC. As of now, EPA does not feel enough is known about the types of radiation that may be in these wells to understand what threat, if any, it might pose.

## Current and Future Actions

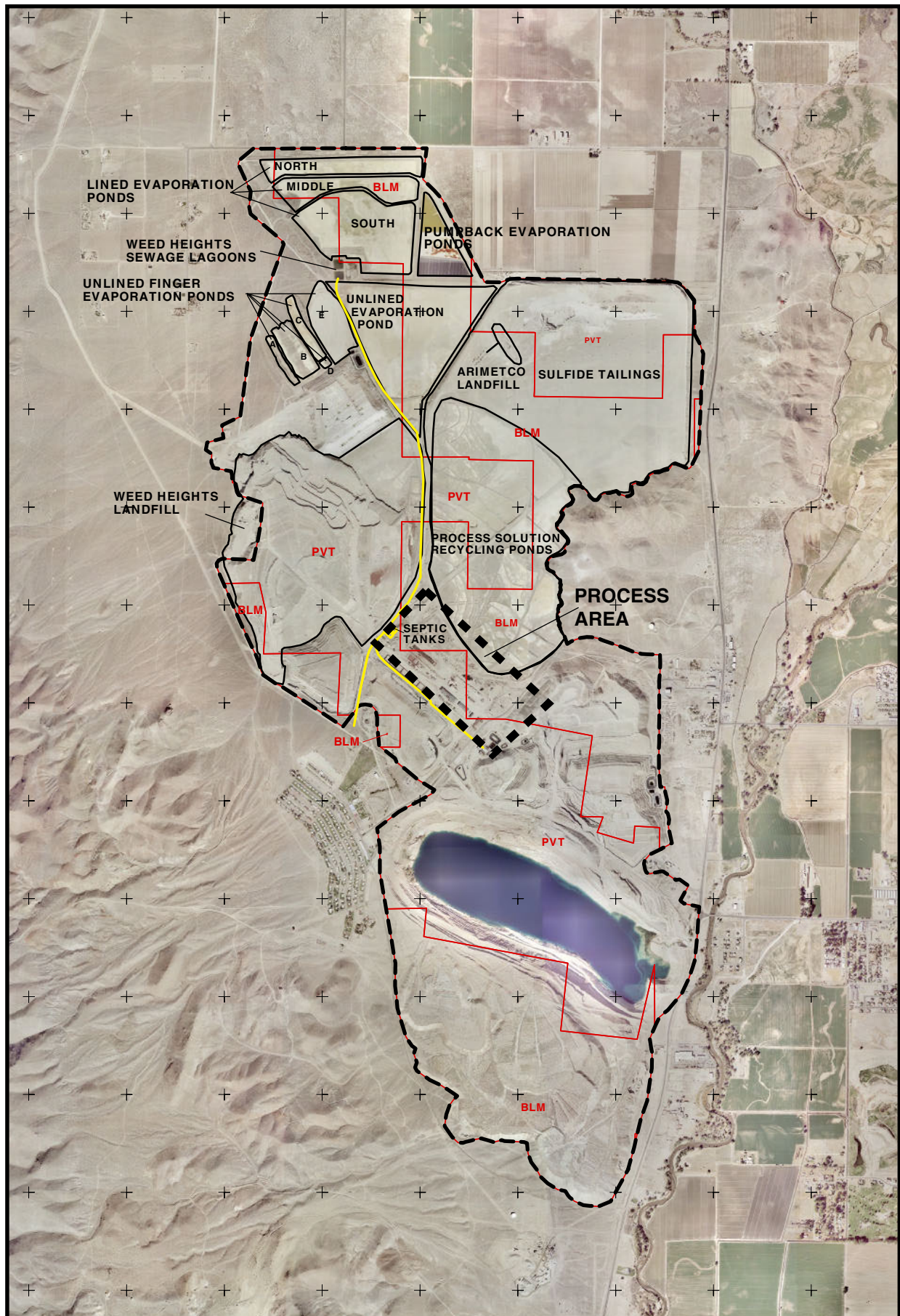
Since our last fact sheet in October 2004, progress has been made on some of the most important areas of the mine. Below are the priority action items and where we stand with implementing them. With EPA now as the lead agency, we anticipate meeting our goals, and those of the community, more quickly in the coming months.

### Domestic Well Sampling

ARC continues to monitor wells on a quarterly basis. The domestic well sampling that has already occurred requires additional analysis, meaning we need to collect more data. The existing data does not provide enough information to better understand the type of risk, if any, posed by drinking the water. Future sampling will be more informative to residents because we will better understand what type of radiation is present and at what levels.

Groundwater monitoring wells will be installed between the mine and residences to the north to determine if contamination from the mine is moving toward this area. This will help us determine if constituents in drinking water are coming from the mine or are naturally occurring. We are hoping to begin installing these





Anaconda / Yerington Mine Site

monitoring wells by the middle of 2005 and should have some preliminary sense for where the uranium is coming from by the end of the year. The monitoring wells cannot be installed sooner because the work plan for this activity is not due until the end of January and then it must be reviewed and finalized, which can take several weeks. Additionally, both the drill rig and driller that are appropriate for this activity are currently working in the Process Area and need to finish there before starting on the off-site wells.

### Dust Mitigation

Keeping potentially hazardous dust from blowing around and off the site is a priority. Permanent air monitoring stations are being installed in six locations: two on the west side of the mine, three along the north boundary and one on the east side. We are hoping to begin the sampling in January or February. In addition, capping of on-site problem areas is being considered to see if we can control some of the potential sources of dust that could be blowing off the site, though we still need to agree on where and how to do this.

### Aerial Survey for Radiation

EPA believes an aerial survey of the mine site and nearby communities would provide valuable information on the general extent of contamination on and off site. This technique, which EPA has used at other mining sites, involves a low-flying helicopter with equipment that measures radiation while flying in a back and forth grid pattern. EPA expects this work to be conducted over the next six to nine months.

### Site Security

Due to potential hazards on the mine property, including radiation danger, better fencing and warnings are necessary. Signs warning of Radiation Danger were installed by BLM last month and portions of the fencing

repaired. BLM rangers will be checking the fencing and security on a regular basis, and it is possible that daytime security seven days a week may be instituted. In addition, BLM law enforcement will coordinate with local law enforcement to increase patrols and improve communication concerning site security.

## Health Issues

EPA understands the public's concern over potential health impacts from contamination at the mine. At this point, we cannot say what, if any, health impacts from the site currently exist. Additionally, it is impossible to determine what exposures, if any, nearby residents may have already had. However, our investigation plans are designed to get the answers we need to protect the public and the environment. One way we can do that is through a comprehensive study of the ways people might be in contact with contaminants and how likely human health effects might occur in the future because of those contaminants. This "Risk Assessment" is a tool to determine what cleanup actions are appropriate to protect your health. In addition, we rely on our relationships with health professionals to work with communities to get the information they need. One of those resources is a branch of the Centers for Disease Control (CDC) known as the Agency for Toxic Substances and Disease Registry (ATSDR). ATSDR assists EPA by identifying current risk on sites being addressed under Superfund. They have a Regional Representative in San Francisco and a team of scientists in Atlanta who are currently reviewing available environmental data on the mine site. The representative listed in the contacts below has communicated with some Yerington residents, both tribal and non-tribal, during the past year. Please feel free to write, call or email her with concerns you may have about possible site-related health problems.

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## INFORMATION REPOSITORY

Some reports and data on the Anaconda/Yerington Mine site are currently available at the library listed below. We will be adding new information as it becomes available.

**Lyon County Library**  
20 Nevin Way  
Yerington, NV 89447  
(775) 577-5042

Hours: Mon, Wed, Fri—9 a.m. to 6 p.m.  
Tues, Thurs—9 a.m. to 8 p.m.  
Saturday—9 a.m. to 4 p.m.

# FOR MORE INFORMATION

Below is a list of personnel from the agencies involved with the Anaconda/Yerington Mine site. Please feel free to contact any of them with questions or concerns.

**EPA: Jim Sickles**

Remedial Project Manager (SFD-8-2)  
(415) 972-3265  
sickles.james@epa.gov

**Vicki Rosen**

Community Involvement Coordinator (SFD-3)  
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rosen.vicki@epa.gov

75 Hawthorne St.  
San Francisco, CA 94105

You may also reach Jim or Vicki by leaving a message on EPA's toll-free line: **(800) 231-3075**.  
You will receive a return call as quickly as possible.

**ATSDR: Libby Vianu**

Regional Representative  
(415) 947-4319  
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75 Hawthorne St., Suite 100  
San Francisco, CA 94105

**BLM: Craig Smith**

Project Manager  
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P.O. Box 12000  
Reno, NV 89520



## MAILING LIST COUPON

If you are not already on our Anaconda/Yerington Mine site mailing list and would like to receive fact sheets, meeting announcements, etc. on the project, please fill in the coupon below and mail to: Vicki Rosen, Community Involvement Coordinator, U.S. EPA, 75 Hawthorne St. (SFD-3), San Francisco, CA 94105

Or, you may call or email Vicki with your mailing information: (415) 972-3244 or (800) 231-3075, rosen.vicki@epa.gov

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

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Phone (optional): \_\_\_\_\_ E-Mail (optional): \_\_\_\_\_

Representing (optional): \_\_\_\_\_



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*BLM sampling for radiation, Dec. 2004*



*ARC sampling Process Area, Dec. 2004*

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